

RESPONSE

This Amendment is responsive to the Office Action on the merits in this matter, mailed February 20, 2004. In view of the amendments and the remarks made herein, the applicant respectfully requests reconsideration and further examination of this application.

In response to the various objections and rejections set forth in the Official Action, the specific remarks are set forth below.

REMARKS

The examiner has raised the following issues:

1. REJECTION UNDER 35 U.S.C. SECTION 112 (first Paragraph)

Claims 25-30 stand rejected under 35 U.S.C. Section 112, first paragraph, as allegedly containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. The applicant respectfully disagrees. The concept that the structure being acted upon does not appreciably increase in thickness when the contacting end of the indenter is engaged with a surface of the structure is clearly shown in the drawings, for example, in FIGS. 129 and 130. Further, this benefit of the presently claimed process was clearly set forth at col. 4, lines 9-11 of U.S. Patent No. 6,615,636, a prior application which was incorporated herein by reference, where it was noted that the presently claimed improved manufacturing process "significantly reduces or effectively eliminates surface marring and upset associated with mandrel methods, thus significantly increasing fatigue life." Those of ordinary skill in the art and to which that specification was directed appreciate that surface upset involves increases in thickness of a workpiece due to a "volcano" or similar shaped effect. Thus, the invention as claimed is clearly within the disclosure of this application. An amendment has been made to the present specification, to the end of the paragraph beginning at page 75, line 22, to clarify the matter and to include in the written specification a disclosure that was

previously in the drawing and in the prior application incorporated by reference herein. Thus, it is believed that this basis of rejection has now been overcome, and it is respectfully requested that the same be withdrawn.

2. REJECTION UNDER 35 U.S.C. SECTION 112 (second paragraph)

The examiner has rejected claim 24 and claims 108-110 as being indefinite for failing to point out and distinctly claim the subject matter that the applicant regards as the invention. The examiner is correct and thus claims 24 and 108 have been amended to expressly include the elements of the method, rather than attempt to reference a prior claim. As amended, with respect to claims 24 and 108, and claims 109 and 110 dependent on claim 108, it is believed that any indefiniteness has now been removed from these claims; as amended herein, and therefore it is respectfully requested that this basis of rejection be removed.

3. REJECTION UNDER 35 U.S.C. SECTION 102(b)

as being anticipated by Wong

(Canadian Patent Document No. 2,121,120)

Next, claims 19, 20, 22, 23, 24, 46, 47, 48, 49, 50, 51, 53, 77 and 78 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Wong '120. In response, the applicant has amended claims 19, 22, 23, 25, and 46 to clearly point out that the contacting surface portion of the indenter utilized in the present invention includes a curved and or slanted portion. This clearly distinguishes the instant invention over the cited Wong

reference, where the use of a flat punch or indenter is disclosed. Claims dependent on independent claims 19, 22, 25, and 46 are thus also clearly distinguishable over the cited Wong reference. Thus, it is respectfully requested that the rejection of claims 19, 20, 22, 23, 24, 46, 47, 48, 49, 50, 51, 53, 77 and 78 based on 35 U.S.C. § 102(b) be removed.

Further, with respect to claims 77 and 78, these claims were previously dependent upon a cancelled claim but have been amended to be dependent upon allowed claim 37. Thus, it is respectfully requested that any basis for rejection of these claims be withdrawn.

4. REJECTION UNDER 35 U.S.C. SECTION 103(a)
as being obvious over Wong
(Canadian Patent Document No. 2,121,120)

Next, claims 74, 75, 79 and 80 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Wong '120. In response, the applicant has amended claim 74, to clearly point out that the contacting surface portion of the indenter utilized in the present invention includes a curved and or slanted portion. This is clearly a non-obvious feature of the instant invention over the cited Wong reference, where the use of a flat punch or indenter is disclosed. Claims dependent on independent claim 74 are thus also clearly novel and non-obvious over the cited Wong reference. Wong does not teach or suggest the use of the presently claimed indenters. Consequently, it is respectfully

requested that the rejection of claim 74, and claim 75 dependant thereon, as based on 35 U.S.C. § 103(a) be withdrawn.

Further, with respect to claims 79 and 80, this basis of rejection is not understood. Claim 79 is dependent on allowed claims 1 and 7. Claim 80 is dependant on allowed claim 79. Thus, these dependent claims in combination with their parent claims are even less obvious, and should be allowed. Thus, it is respectfully requested any rejection of these dependent claims 79 and 80 based on the cited Wong reference be withdrawn.

5. OTHER CLAIM AMENDMENTS

Amendment was made to claim 2 to add the word "wherein" which was inadvertently omitted from language on claim 2, although the word was correctly was used in the same location after the equation on companion claims such as claim 1.

Amendment was made to claim 124 to add a period at the end.

6. AMENDMENTS TO THE SPECIFICATION

Amendments made to the specification to (1) correct minor typographical errors; (2) to correct line placement of the replacement paragraphs as requested by the examiner in the current office action; and (3) to conform the specification with the disclosure of the drawings as previously submitted on December 2, 2003.

7. COMMENTS ON RESPONSE TO APPLICANT'S COMMENTS

On page 6 of the office action, the examiner has indicated that Wong's disclosure of non-circular openings would be within the purview of a skilled artisan to apply the technique to gears and turbine rotors. The applicant cannot agree, since a toothed gear arrangement or solid turbine rotor arrangement having attachment points for blades is are both vastly different structures than those disclosed by Wong. However, in view of amendments made herein, there appears no need to carry this discussion forward, other than to preserve the matter for appropriate discussion in a related case as may become necessary.

SUMMARY

This amendment is in response to the Examiner's Office Action mailed February 20, 2004. It is respectfully submitted, that in view of the arguments made above, and amendments made herein, the applicant's invention is neither anticipated nor made obvious by the prior art of record. Additionally, amendments have been made to overcome all rejections based on 35 U.S.C. Section 112.

For the reasons discussed in detail above, it is believed that this application is now limited to claims which are clearly patentable over references of record. Favorable consideration of this application is therefore believed to be in order, and accordingly, is earnestly solicited.


In the event any further issues remain after consideration of this response, the undersigned would welcome a phone call or e-mail in an attempt to resolve outstanding matters and bring the case into condition for allowance.

Favorable consideration of this application is therefore believed to be in order and such action is earnestly solicited.

Done at Kent, County of King, State of Washington, on the 20th day of August, 2004.

Respectfully submitted,

ERIC T. EASTERBROOK

By: 
R. Reams Goodloe, Jr.
Reg. No. 32,466

Phone: 253-859-9128

Fax: 253-859-8915

Customer No. 20793

R. Reams Goodloe, Jr.

Reg. No. 32,466

24722-104th Avenue, S.E.

Suite 102

Kent, Washington

98030-5322